Taking second matters first, the examiner has rejected claims 1 and 9 under 35 U.S.C. §102 as being anticipated by Saito U.S. Patent Number 5,541,926. The cancellation of those claims has rendered the rejection moot, but the following comments regarding Saito are believed appropriate for the record.

Saito does indeed relate to a method of interfacing frame based time division multiplex (TDM) telecommunications traffic from a frame based TDM network to an asynchronous network such as an ATM network. The method of Saito comprises mapping the frame based TDM traffic into cells and scheduling the despatch of said cells into the asynchronous network at a substantially constant ATM cell rate. However, Saito is directed to accumulating TDM data for each of a plurality of input lines until such time as said accumulated data reaches a predetermined level appropriate for a payload section of an ATM cell to be assembled. Assembled ATM payload sections have header sections attached to form ATM cells and these cells are outputted to an ATM transmission path. However, the system includes an empty cell generator for generating empty ATM cells in order to ensure a full ATM cell flow on the transmission path. It is accepted in Saito that the transmission rate of the ATM transmission path is always greater than the rate at which TDM data is accumulated, thereby requiring the empty ATM cell generator to ensure full ATM cell flow on the ATM transmission path. It is a consequence of this that the system of Saito is able to assemble the ATM cells from the input TDM data, which are entered at an arbitrary speed, without being restricted by the speed of said input data and without requiring an additional hardware such as a speed matching buffer. Thus, the system of Saito offers a simplified system for assembling TDM data into ATM cells for transmission.

It is quite clear from the foregoing that Saito does not seek to assemble TDM frames into ATM cells where said TDM frames each support a plurality of data structures, each of which comprise one or more channels from a frame based TDM network, as is the case in the present invention. It is also clear from Saito that it does not require any means for issuing credits to such data structures since it does not seek to address the same technical problem as that of the present invention.

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Consequently, the present invention, as defined by independent claims 2, 10 and 17, is distinct from that disclosed in Saito. Also, given the fact that Saito seeks to implement a simplified TDM to ATM cell mapping and transmission system, a skilled person would not be motivated by the teaching of Saito to modify it to arrive at the system of the present invention.

Returning now to the first part of the Office Action in which the Examiner has objected to both the specification and the claims under 35 USC 112 as employing inexact terms, reconsideration is requested. The Examiner has indicated that the specification is replete with terms which are not clear, concise and <u>exact</u>. In this regard, he has particularly drawn attention to the terms "substantially" and "slightly".

By far the easiest way to attend to the Examiner's 35 USC 112 objection would be to delete these terms from both the specification and claims. However, it is the applicants' view that, firstly, it is not reasonable to require them to do so and, secondly, that, to do so, would diminish the scope of protection that the applicants are entitled.

35 USC requires that the specification shall contain a written description of the invention, and of the manner and process of making and using it, in <u>such</u> (emphasis added) full, clear, concise and exact terms as to enable <u>any person skilled in the art</u> (emphasis added) to which it pertains to make and use the same. Thus, the requirement of exactness to which the Examiner refers is not an absolute requirement but is qualified by the term "such" and by the fact that the addressee of a patent specification is not a lay person but a person skilled in the relevant art. It is with this in mind that the terms objected to by the Examiner must be considered.

A patent specification is not required to be a precise set of instructions such as might be found in a model airplane kit. It is well established that one who is skilled in the art brings with him expertise and experience which enables him to construe the terminology used in a patent specification. In this case, it would seem that the Examiner is guilty of doing the reverse in that he appears to have taken the terms

"substantially" and "slightly" in isolation, rather than attempting to construe them in their context. For example, the term "slightly" has a dictionary definition of "inconsiderable; of little significance; barely perceptible", and thus the term "slightly larger" on page 6, line 27 of the specification must be construed with respect to the teaching in the present invention that the scheduler is designed to schedule the assembly of 8000 synchronous data channels into a number of data packet structures and thus would require at least 8000 ticks per frame. In reality the number of ticks may be set to slightly larger than the number of synchronous data channels, the additional ticks providing tolerance or slack within the basic scheduling algorithm to enable housekeeping and other control tasks to be interleaved within the basic scheduling algorithm. It is in this context that a skilled person would construe the term "slightly larger" and it is submitted that a skilled person would have no difficulty based on his skill and experience in the field of construing this term. Of course, the applicants can delete the term "slightly" so that this portion of the specification refers to the fact that the number of ticks may be set to larger than the number of synchronous data channels, thus denying the skilled addressee something of the teaching of the present invention since he will now be faced with construing what the term "larger" means in this context which is, of course, a broader term than the presently existing term.
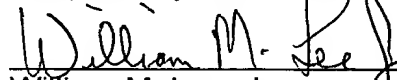
The Examiner's objection to the use of the term "substantially" in both the specification and claims is believed to be inappropriate. In this case, to delete this term from the claims would leave the applicant open to a challenge that the claims only cover a case in which the despatch of cells or packets into the ATM network is at a constant rate and that this as a matter of prosecution estoppel must be construed narrowly due to the applicant's agreement to delete the term "substantially". A skilled addressee would understand that, in any system which is subject to jitter, it follows that cell rates are rarely exactly the same over all time periods and that a degree of variation occurs. Consequently it follows that while a constant rate is desired, this rate may vary by a small amount and thus it is reasonable in the context of the present invention to describe the rate as "substantially constant".

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Thus, it is believed that use of the term "substantially" is appropriate in the present application, and is not at all confusing or inexact. It is a term that is well known to those skilled in the art, and is a term that is used consistently not only in the present art, but throughout modern patent specifications. Reconsideration and retraction of the objection and rejection under 35 U.S.C. §112 is therefore urged.

Given the above, it is submitted that this application is in proper order and is in condition for allowance. The examiner's further and favorable reconsideration in that regard is urged.

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Respectfully submitted,

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